Bruhat Bangalore Mahanagara Palike
Excecutive Engineer Project Division Yelahanka

Name of Work: Improvements to Cross roads and drains at Srinivasapura

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
1	**Removing and refixing** stone slabs of drains and pointing in CM (1:3) (I No-5.33, P No-25)								
	Basic rate	76.00							
	11% AD-HOC	8.36							
	Sub total	84.36							
	6.00% AW	5.06							
	Total	**89.42**							
	Crs Rd-2 frm sai baba temple Rd	2	25.00	1.35		67.50			
	Crs Rd-3 frm sai baba temple Rd	2	10.00	1.35		27.00			
						94.50	**Sqm**	**89.42**	**8,450.19**
2	KSRRB 200-8. **Clearing and grubbing road land** including uprooting rank Sqm vegetation, grass, brush, shrubs, saplings and trees of girth upto 300mm, by manual means, in area of light jungle, removal of stumps, disposal of unserviceable materials, stacking of serviceable materials labour charges complete as per specifications.(I No-18.11, P No-136)								
	Basic rate	6.00							
	11% AD-HOC	0.66							
	Sub total	6.66							
	6.00% AW	0.40							
	Total	**7.06**							
	Saibaba temple Road								
	Chr:82.00m 103.00m	2	21.00	1.50		63.00			
	Chr:103.00m to 268.00m	2	165.00	1.50		495.00			
	Chr:268.00m to 409.00m	2	141.00	1.50		423.00			
						981.00	**Sqm**	**7.06**	**6,925.86**
3	KSRRB 300-1. **Earthwork excavation** by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete asper specifications.MORTH / Chapter 3(I No-19.1, P No-133)								
	Basic rate	82.00							
	11% AD-HOC	9.02							
	Sub total	91.02							
	6.00% AW	5.46							
	Sub total	96.48							
	10km lead & lift, transport	84.00							
	Total	**180.48**							
	CC Drain								
	Saibaba temple Road								
	Chr:82.00m 103.00m	2	21.00	1.05	0.90	39.69			
	Chr:103.00m to 268.00m	2	165.00	1.05	0.90	311.85			
	Chr:268.00m to 409.00m	1	141.00	1.05	0.90	133.25			
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Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Crs Rd-1 frm sai baba temple Rd	1	59.00	0.50	0.45	13.28			
	Crs Rd-2 frm sai baba temple Rd	2	30.00	0.50	0.45	13.50			
	Crs Rd-3 frm sai baba temple Rd	2	15.00	0.50	0.45	6.75			
						518.31	**Cum**	**180.48**	**93,545.21**
4	Providing **granite slabs** of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete. (I No-5.31.1, P No-25)								
	Basic rate	628.00							
	11% AD-HOC	69.08							
	Sub total	697.08							
	6.00% AW	41.82							
	Total	**738.90**							
	Crs Rd-2 frm sai baba temple Rd	2	14.00	1.35		37.80			
	Crs Rd-3 frm sai baba temple Rd	2	15.00	1.35		40.50			
						78.30	**Sqm**	**738.90**	**57,855.87**
5	KSRB 4-1.2 : Providing and laying in position **plain cement concrete of mix 1:3:6** with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No. KBS 4.1, 4.2.(P.No-12,I No-4.2)								
	Basic rate	5046.00							
	11% AD-HOC	555.06							
	Sub total	5601.06						-	
	6.00% AW	336.06							
	Total	**5937.12**							
	CC Drain								
	Saibaba temple Road								
	Chr:82.00m 103.00m	2	21.00	1.05	0.15	6.62			
	Chr:103.00m to 268.00m	2	165.00	1.05	0.15	51.98			
	Chr:268.00m to 409.00m	1	141.00	1.05	0.15	22.21			
	CC Road								
	Saibaba temple Road								
	Chr:0.00m to 82.00m	1	82.00	6.00	0.15	73.80			
						154.60	**Cum**	**5937.12**	**917863.91**
6	KSRB 4.2.2 : Providing and laying in position reinforced cement concrete of **design mix M20** with OPC cement @ 320kgs, with 20mmand down size graded granite metal coarse aggregates @0.0.69cum and fine aggregtes @ 0.460cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintles, retaining walls, return walls, walls (any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing, complete as per specifications. Specification No. KBS 4.1, 4.6(I No-4.11,P No-13)								

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Basic rate	6011.00							
	11% AD-HOC	661.21							
	Sub total	6672.21							
	6.00% AW	400.33							
	Total	**7072.54**							
	CC Drain Raft								
	Saibaba temple Road								
	Chr:82.00m 103.00m	2	21.00	0.90	0.15	5.67			
	Chr:103.00m to 268.00m	2	165.00	0.90	0.15	44.55			
	Chr:268.00m to 409.00m	1	141.00	0.90	0.15	19.04			
	CC Drain Wall								
	Saibaba temple Road								
	Chr:82.00m 103.00m	4	21.00	0.15	0.60	7.56			
	Chr:103.00m to 268.00m	4	165.00	0.15	0.60	59.40			
	Chr:268.00m to 409.00m	2	141.00	0.15	0.60	25.38			
						161.60	**Cum**	**7072.54**	**1142887.10**
7	KSRB 4-6.4 : Providing and **removing centering, shuttering,** strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specificaitons. Specification No. KBS 4.6.2								
	Basic rate	293.00							
	11% AD-HOC	32.23							
	Sub total	325.23							
	6.00% AW	19.51							
	Total	**344.74**							
	CC Drain Wall								
	Saibaba temple Road								
	Chr:82.00m 103.00m	8	21.00		0.60	100.80			
	Chr:103.00m to 268.00m	8	165.00		0.60	792.00			
	Chr:268.00m to 409.00m	4	141.00		0.60	338.40			
						1231.20	**Sqm**	**344.74**	**424443.89**
8	KSRB 4.9.2 : Providing **T.M.T steel reinforcement** for R.C.C workincluding straightening, cutting, bending, hooking, placing in position,lapping and / or welding wherever required, tying with binding wire andanchoring to the adjoining members wherever necessary complete asper design (laps, hooks and wastage shall not be measured and paid)cost of materials, labour, HOM of machinery complete as perspecifications.Specification No. KBS 4.6.3(I No-4.46.2,P No-17)								
	Basic rate	60607.00							
	11% AD-HOC	6666.77							
	Sub total	67273.77							
	6.00% AW	4036.43							
	Total	**71310.20**							
	Consider 60kg/Cum	1	161.60	60.00		**9695.70**			
						9.70	**Tn**	**71310.20**	**691402.31**
9	Providing and Fixing **pre cast covering Slab** made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Basic rate	2100.00							
	Saibaba temple Road								
	Ch:82.00m 103.00m	2	21.00	0.90		37.80			
	Ch:103.00m to 268.00m	2	165.00	0.90		297.00			
	Ch:268.00m to 409.00m	1	141.00	0.90		126.90			
						461.70	**Sqm**	**2100.00**	**969570.00**
10	Providing and Fixing **pre cast covering Slab 250mm thick** made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge. (Data Rate)								
	Basic rate	5111.00							
	For Cross Roads	4	5.50	1.20		26.40			
						26.40	**Sqm**	**5111.00**	**134930.40**
11	KSRRB M300-14. **Excavation for roadwork** in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1km and complete as per specifications. MORTH Specification No.301(P.No. 143, I.No. 19.14)								
	Basic rate	46.00							
	11% AD-HOC	5.06							
	Sub total	51.06							
	6.00% AW	3.06							
	Sub total	54.12							
	10km lead & lift, transport	84.00							
	Total	**138.12**							
	Saibaba temple Road								
	Ch:0.00m to 82.00m	1	82.00	6.00	0.30	147.60			
	Ch:82.00m 103.00m	1	21.00	5.00	0.30	31.50			
	Ch:103.00m to 268.00m	1	165.00	6.50	0.25	268.13			
	Ch:268.00m to 409.00m	1	141.00	5.50	0.20	155.10			
	Crs Rd-1 frm sai baba temple Rd	1	59.00	4.00	0.25	59.00			
	Crs Rd-2 frm sai baba temple Rd	1	61.00	4.00	0.25	61.00			
	Crs Rd-3 frm sai baba temple Rd	1	57.00	4.00	0.20	45.60			
						767.93	**Cum**	**138.12**	**106068.57**
12	KSRRB 300-**Compaction KSRRB 300-58. Compaction** of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3(P.No. 149, I.No. 19.64)								
	Basic rate	5.00							
	11% AD-HOC	0.55							
	Sub total	5.55							
	6.00% AW	0.33							
	Total	**5.88**							

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Saibaba temple Road								
	Ch:0.00m to 82.00m	1	82.00	6.00		492.00			
	Ch:82.00m 103.00m	1	21.00	5.00		105.00			
	Ch:103.00m to 268.00m	1	165.00	6.50		1072.50			
	Ch:268.00m to 409.00m	1	141.00	5.50		775.50			
	Crs Rd-1 frm sai baba temple Rd	1	59.00	4.00		236.00			
	Crs Rd-2 frm sai baba temple Rd	1	61.00	4.00		244.00			
	Crs Rd-3 frm sai baba temple Rd	1	57.00	4.00		228.00			
						3153.00	**Sqm**	**5.88**	**18,539.64**
13	KSRRB M400-6.1. Construction of **granular sub-base** by providing close graded crushed stone aggregates of granite / trap / basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method. - For Grading II Material (P.No.155, I.No. 20.4.2)								
	Basic rate	1571.00							
	11% AD-HOC	172.81							
	Sub total	1743.81							
	6.00% AW	104.63							
	Total	**1848.44**							
	Saibaba temple Road								
	Ch:0.00m to 82.00m	1	82.00	6.00	0.15	73.80			
	Ch:82.00m 103.00m	1	21.00	5.00	0.15	15.75			
	Ch:103.00m to 268.00m	1	165.00	6.00	0.15	148.50			
	Ch:268.00m to 409.00m	1	141.00	5.50	0.15	116.33			
	Crs Rd-1 frm sai baba temple Rd	1	59.00	4.00	0.15	35.40			
	Crs Rd-2 frm sai baba temple Rd	1	61.00	4.00	0.15	36.60			
	Crs Rd-3 frm sai baba temple Rd	1	57.00	4.00	0.15	34.20			
						460.58	**Cum**	**1848.44**	**851345.25**
14	KSRRB M400-17 : Providing, laying, spreading and compacting graded stone aggregate to **wet mix macadam** specification including premixing the material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications.(P.No.158, I.No. 20.18)								
	Basic rate	1668.00							
	11% AD-HOC	183.48							
	Sub total	1851.48							
	6.00% AW	111.09							
	Total	**1962.57**							
	Saibaba temple Road								
	Ch:82.00m 103.00m	1	21.00	5.00	0.225	23.63			
	Ch:103.00m to 268.00m	1	165.00	6.00	0.225	222.75			
	Ch:268.00m to 409.00m	1	141.00	5.50	0.225	174.49			

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Crs Rd-1 frm sai baba temple Rd	1	59.00	4.00	0.225	53.10			
	Crs Rd-2 frm sai baba temple Rd	1	61.00	4.00	0.225	54.90			
	Crs Rd-3 frm sai baba temple Rd	1	57.00	4.00	0.225	51.30			
						580.16	**Cum**	**1962.57**	**1138609.52**
15	KSRRB M500-6. Providing and applying **primer coat** with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH Specification No. 502 (P.No.161, I.No. 21.6)								
	Basic rate	26.00							
	11% AD-HOC	2.86							
	Sub total	28.86							
	6.00% AW	1.73							
	Total	**30.59**							
	Saibaba temple Road								
	Ch:82.00m 103.00m	1	21.00	5.00		105.00			
	Ch:103.00m to 268.00m	1	165.00	6.00		990.00			
	Ch:268.00m to 409.00m	1	141.00	5.50		775.50			
	Crs Rd-1 frm sai baba temple Rd	1	59.00	4.00		236.00			
	Crs Rd-2 frm sai baba temple Rd	1	61.00	4.00		244.00			
	Crs Rd-3 frm sai baba temple Rd	1	57.00	4.00		228.00			
						2578.50	**Sqm**	**30.59**	**78,876.32**
16	KSRRB 500-7. Providing and applying **tack coat** using 80/100 grade bitumen(VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5 (P.No.160, I.No. 21.7)								
	Basic rate	11.00							
	11% AD-HOC	1.21							
	Sub total	12.21							
	6.00% AW	0.73							
	Total	**12.94**							
	For BC								
	Saibaba temple Road								
	Ch:82.00m 103.00m	1	21.00	5.00		105.00			
	Ch:103.00m to 268.00m	1	165.00	6.00		990.00			
	Ch:268.00m to 409.00m	1	141.00	5.50		775.50			
						1870.50	**Sqm**	**12.94**	**24,204.27**

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	KSRRB M500-17. Providing and laying **dense graded bituminous macadam** using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No.163, I.No. 21.17.6)								
	Basic rate	6717.00							
	11% AD-HOC	738.87							
	Sub total	7455.87							
	6.00% AW	447.35							
	Total	**7903.22**							
	Saibaba temple Road								
	Ch:82.00m 103.00m	1	21.00	5.00	0.05	5.25			
	Ch:103.00m to 268.00m	1	165.00	6.00	0.05	49.50			
	Ch:268.00m to 409.00m	1	141.00	5.50	0.05	38.78			
						93.53	**Cum**	**7903.22**	**739148.65**
	KSRRB M500-19. Providing and laying **bituminous concrete 40 mm thick** with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.9 complete in all respects complete as per specifications. MORTH Specification No. 509 - using40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 45 mm) with 6 % VG-30 Bitumen (P.No.165, I.No. 21.22.6)								
	Basic rate	7659.00							
	11% AD-HOC	842.49							
	Sub total	8501.49							
	6.00% AW	510.09						-	
	Total	**9011.58**							
	Saibaba temple Road								
	Ch:82.00m 103.00m	1	21.00	5.00	0.04	4.20			
	Ch:103.00m to 268.00m	1	165.00	6.00	0.04	39.60			
	Ch:268.00m to 409.00m	1	141.00	5.50	0.04	31.02			
	Cts Rd-1 frm sai baba temple Rd	1	59.00	3.75	0.04	8.85			
	Cts Rd-2 frm sai baba temple Rd	1	61.00	3.75	0.04	9.15			
	Cts Rd-3 frm sai baba temple Rd	1	57.00	3.75	0.04	8.55			
						101.37	**Cum**	**9011.58**	**913503.86**
	KSRB 4-1.5 : Providing and laying in position plain **cement concrete of mix M20** with OPC cement @ 300kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.43cum, with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No. 4.5 of PWD SR 2015-16)								
	Basic rate	5542.00							
	11% AD-HOC	609.62							
	Sub total	6151.62							
	6.00% AW	369.10							

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
	Total	**6520.72**							
	Road								
	Saibaba temple Road								
	Ch:0.00m to 82.00m	1	82.00	6.00	0.15	**73.80**	**Cum**	**6520.72**	**481229.14**
20	**Vaccum de-watering** with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift.(P.No.177, I.No. 22.7)								
	Basic rate	90.00							
	11% AD-HOC	9.90							
	Sub total	99.90							
	6.00% AW	5.99							
	Total	**105.89**							
	Saibaba temple Road								
	Ch:0.00m to 82.00m	1	82.00	6.00		492.00			
						492.00	**Sqm**	**105.89**	**52,097.88**
21	Providing **groove cutting** for width of 5mm to 10mm and depth 80mm- 100mm including cost of cutting machine, generator & HOM of machinery, including cost of blade,coolant etc., including cleaning of groove & providing sand and hot bitumen fillars, and filler metal etc., including cost of conveyance of all materials, labour, lead and lift charges and all other incidental charges as per drawing and as per specifications. - for concrete pavement (P.No.177, I.No. 22.7)								
	Basic rate	115.00							
	11% AD-HOC	12.65							
	Sub total	127.65							
	6.00% AW	7.66							
	Total	**135.31**							
	Saibaba temple Road								
	Ch:0.00m to 82.00m	1	82.00						
		8	6.00			48.00			
						48.00	**mtr**	**135.31**	**6,494.88**
22	KSRRB M800-13.**Road Marking with Hot Applied Thermoplastic Compound** with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803(P.No.185, I.No. 24.15)								
	Basic rate	512.00							
	11% AD-HOC	56.32							
	Sub total	568.32							
	6.00% AW	34.10							
	Total	**602.42**							
	Saibaba temple Road								
	Ch:82.00m 103.00m	2	21.00	0.10		4.20			
	Ch:103.00m to 268.00m	2	165.00	0.10		33.00			
	Ch:268.00m to 409.00m	2	141.00	0.10		28.20			
	Crs Rd-1 frm sai baba temple Rd	2	59.00	0.10		11.80			
	Crs Rd-2 frm sai baba temple Rd	2	61.00	0.10		12.20			
	Crs Rd-3 frm sai baba temple Rd	2	57.00	0.10		11.40			
						100.80	**Sqm**	**602.42**	**60,723.94**

Sl No	Description of Items	No	Length	Width	Depth	Quantity	Unit	Rate	Amount
								Total Construction Cost	8918716.64
								11% KRIDL Charges	981058.83
								1% Towards PMC Cost	100000.00
								Sub Total	9999775.47
								Utility Shifting,Miscellaneous and Rounding off	224.53
								GRAND TOTAL	10000000.00

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2016-2017, issue rates and Data Rates. 11% AD-HOC is added as per order issued on 06-02-2018

Assistant Engineer
Project Division Yelahanka
BBMP Bangalore

Asst. Executive Engineer,
Project Division Yelahanka
BBMP Bangalore

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Executive Engineer,
Project Division Yelahanka
BBMP Bangalore
7/2/18

Administrative Approval

Accorded For 100.00 Lakhs Only
Head of A/C..P3158.....
CER NO :.....118..... Dt:..8/2/18

E.E. (Project) 8/2

Technical Sanction

Accorded For 100.00 Lakhs Only
Head of A/C..P3158.....
CER NO :.....609..... Dt:08/02/18

TA : CE (YNK).